- (b) The materials approved for incorporation by reference in this subpart, and the sections affected are as follows:
- AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
- 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.
 - ASTM D 751–95, Standard Test Methods for Coated Fabrics—160.076–25
- ASTM D 1434-82 (1988), Standard Test Method for Determining Gas Permeability Characteristics of Plastic Film and Sheeting—160.076-25

FEDERAL STANDARDS

- Naval Publishing and Printing Center, Customer Service, 700 Robbins Avenue, Philadelphia, PA 19120.
- In Federal Test Method Standard No. 191A (dated July 20, 1978) the following methods:
 (1) Method 5100, Strength and Elongation, Breaking of Woven Cloth: Grab Method.
 - 160.076-25; (2) Method 5132, Strength of Cloth, Tearing; Falling-Pendulum Method, 160.076-
- (3) Method 5134, Strength of Cloth, Tearing Tongue Method 160 076, 25
- ing; Tongue Method, 160.076–25.
 UNDERWRITERS LABORATORIES (UL)
- Underwriters Laboratories, Inc., 12 Laboratory Drive, Research Triangle Park, NC 27709– 3995 (Phone (919) 549–1400; Facsimile: (919)
- 549-1842) UL 1123, "Marine Buoyant Devices", February 17, 1995, 160.076-35;
- UL 1180, "Fully Inflatable Recreational Personal Flotation Devices", May 15, 1995, 160.076-7; 160.076-21; 160.076-23; 160.076-25; 160.076-29; 160.076-31; 160.076-37; 160.076-39.
- UL 1191, "Components for Personal Flotation Devices", May 16, 1995, 160.076-21; 160.076-25; 160.076-39.
- [CGD 94-110, 60 FR 32848, June 23, 1995, as amended by CGD 95-072, 60 FR 50467, Sept. 29, 1995, CGD 94-110, 61 FR 13945, Mar. 28, 1996; CGD 96-041, 61 FR 50733, Sept. 27, 1996; CGD 97-057, 62 FR 51048, Sept. 30, 1997; USCG-1999-5151, 64 FR 67184, Dec. 1, 1999]

§ 160.076–13 Approval procedures for inflatable PFDs.

- (a) Manufacturers seeking approval of an inflatable PFD design shall follow the procedures of this section and subpart 159.005 of this chapter.
- (b) Each application for approval of an inflatable PFD must contain the information specified in §159.005–5 of this chapter. The application must be submitted to a recognized laboratory. One copy of the application and, except as provided in paragraph (c)(2) of this section, a prototype PFD must be sub-

mitted to the Commandant for preapproval review. If a similar design has already been approved, the Commandant may authorize the recognized laboratory to waive the preapproval review under §§ 159.005–5 and 159.005–7 of this chapter.

- (c) The application must include the following:
- (1) Plans and specifications containing the information required by §159.005–12 of this chapter, including drawings, product description, construction specifications, and bill of materials.
- (2) The information specified in §159.005–5(a)(2) (i) through (iii) of this chapter must be included in the application, except that, if preapproval review has been waived, the manufacturer is not required to send a prototype PFD sample to the Commandant.
- (3) The type of performance (Type I, II, or III) that the PFD is designed to provide along with the Approval Type sought (Type I, II, III, or V).
- (4) Any special purpose(s) for which the PFD is designed and the vessel(s) or vessel type(s) on which its use is intended.
- (5) Buoyancy, torque, and other relevant tolerances to be met during production.
- (6) The text of any optional marking to be included on the PFD in addition to the markings required by §160.076–39.
- (7) A draft of the information pamphlet required by §160.076-35.
- (8) A draft of the owner's manual required by §160.076-37.
- (9) For any conditionally approved PFD, the intended approval condition(s).
- (d) The description required by §159.005-9 of this chapter of quality control procedures may be omitted if the manufacturer's planned quality control procedures meet the requirements of §§160.076-29 and 160.076-31.
- (e) Manual and pamphlet. Before granting approval of a PFD design, the Commandant may require changes to the manual and information pamphlet submitted for review to ensure compliance with the requirements of §§ 160.076–35 and 160.076–37.
- (f) Waiver of tests. A manufacturer may request that the Commandant waive any test prescribed for approval

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under this subpart. To request a waiver, the manufacturer must submit to the Commandant and the recognized laboratory, one of the following:

- (1) Satisfactory test results on a PFD of sufficiently similar design as determined by the Commandant.
- (2) Engineering analysis demonstrating that the test for which a waiver is requested is not appropriate for the particular design submitted for approval or that, because of its design or construction, it is not possible for the PFD to fail that test.
- (g) Alternative requirements. A PFD that does not meet the requirements of this subpart may be approved by the Commandant if the device—
- (1) Meets other requirements prescribed by the Commandant in place of or in addition to the requirements of this subpart; and
- (2) As determined by the Commandant, provides at least the same degree of safety provided by other PFDs that meet the requirements of this subpart.

[CGD 94–110, 60 FR 32848, June 23, 1995, as amended by CGD 94–110, 61 FR 13946, Mar. 28, 1996]

§ 160.076–15 Suspension or termination of approval.

As provided in §159.005–15 of this chapter, the Commandant may suspend or terminate the approval of an inflatable PFD design if the manufacturer fails to comply with this subpart or the recognized laboratory's accepted procedures or requirements.

§ 160.076-17 Approval of design or material changes.

- (a) The manufacturer must submit any proposed changes in design, material, or construction to the recognized laboratory and the Commandant for approval before changing PFD production methods.
- (b) Determinations of equivalence of design, construction, and materials may be made only by the Commandant or a designated representative.

$\$\,160.076\text{--}19$ Recognized laboratories.

(a) PFDs. The following laboratories are recognized under \$159.010-9\$ of this chapter to perform the approval and

production oversight functions required by this subpart:

Underwriters Laboratories, Inc., 12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709–3995, (919) 549–1400.

(b) Components. The following laboratories are recognized under subpart 159.010 of this chapter and may perform the component material acceptance, production oversight, and certification functions required by §160.076–21(a)(1):

Underwriters Laboratories, Inc., 12 Laboratory Drive, P.O. Box 13995, Research Triangle Park, NC 27709-3995, (919) 549-1400.

§ 160.076-21 Component materials.

- (a) Each component material used in the manufacturer of an inflatable PFD must.—
- (1) Meet the applicable requirements of subpart 164.019 of this chapter, UL 1191, UL 1180, and this section; and
- (2) Be of good quality and suitable for the purpose intended.
- (b) The average permeability of inflation chamber material, determined in accordance with the procedures specified in \$160.076-25(d)(2)(iii) must not be more than 110% of the permeability of the materials determined in approval testing required by \$160.076-25(d)(2)(iii).
- (c) The average grab breaking strength and tear strength of the inflation chamber material, determined in accordance with the procedures specified in §\$160.076-25(d)(2)(i) and 160.076-25(d)(2)(ii), must be at least 90% of the grab breaking strength and tear strength determined from testing required by §\$160.076-25(d)(2)(i) and 160.076-25(d)(2)(ii). No individual sample result for breaking strength or tear strength may be more than 20% below the results obtained in approval testing.
- (d) Each manual, automatic, or manual-auto inflation mechanism must be marked in accordance with \$160.076–39(e).

[CGD 94–110, 60 FR 32848, June 23, 1995, as amended by CGD 94–110, 61 FR 13946, Mar. 28, 1996]

§ 160.076-23 Construction and performance requirements.

(a) Each inflatable PFD design must—